

Science Shoebox Activity

Title: Cloudy with a Chance of...

Grade 3 Earth and Space Science

Content Standard 8 - The Atmosphere

Grade Learning Expectation: GLE 0307.8.3 Identify cloud types associated with particular atmospheric conditions.

Performance Indicators State:

SPI 0307.8.2 Match major cloud types with specific atmospheric conditions.

Task Objective: The students will create models of cumulus, cirrus, and stratus clouds and associate each with types of weather.

Materials:

Black construction paper

Liquid glue

Scissors

Batting material

Pencil

Background Knowledge for Teachers

Cloud are visible masses of water droplets and/or frozen droplets suspended in the atmosphere. Atmospheric conditions refers to types of weather; such as rain, sleet, snow, thunder, lightening, etc. Clouds can show convective development like cumulus, appear in layered sheets such as stratus, or take the form of thin wisps such as cirrus.

Across the Curriculum

Math

Using a bar graph, measure the types of clouds in the sky each day at recess for one month. Make predictions about the next month with collected data.

SPI 0306.5.1 Interpret a frequency table, bar graph, pictograph, or line plot.

Social Studies

Discuss how farmers and sailors long ago could have predicted the weather based on clouds in the sky. Compare the uses long ago with ways people use clouds as predictors now.

- 3.3.tpi.6. explore how people and their physical environments interact to explore the unity/disunity of humankind with nature by discussing world issues.

Language Arts

Develop a story using cause and effect to describe the weather on your best day ever. Be sure to include details about the way the clouds looked (if you do not remember, relate the clouds to the day's weather).

SPI 0301.5.3 Identify stated cause/effect relationships in text.

References

Web Weather for Kids: Cloud Types

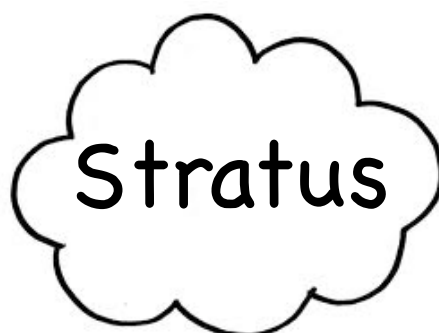
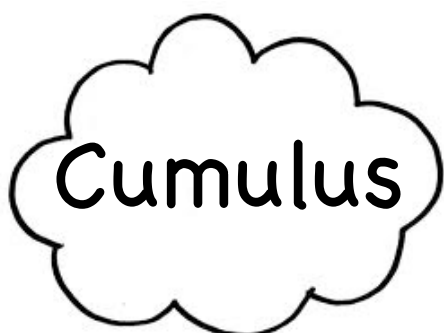
<http://eo.ucar.edu/webweather/cloud3.html>

Kids Connect: Clouds

<http://www.kidskonnnect.com/subject-index/15-science/67-clouds.html>

Cloudy with a Chance of...

1. Examine the three types of clouds on the box.
2. Fill in the graphic organizer



★ Description of Cloud

● Type of weather cloud predicts

3. Create one of each cloud with the batting material on a black sheet of construction paper.
 - Label each cloud - use the descriptive words above to show obvious detail.
 - Put your name on the back.

4. Answer the following assessment questions:

1. On a cool, misty day, it is likely to see which blanket-like clouds in the sky?
2. On a sunny, breezy day, it is likely to see which fluffy clouds in the sky?
3. Today is a very nice day, but the clouds are long and straight. What atmospheric conditions may be here in two or three days?

Please clean up your workstation by throwing away trash, recycling used paper, and putting the glue and scissors away properly.